

INTRODUCTION

The B & K Precision Model 830A Autoranging Capacitance Meter gives a direct reading of capacitance on a 3-½ digit crystal display. The autoranging feature automatically selects the range with the highest resolution. Ten full scale ranges of 199.9 picofarads to 199.9 millifarads include virtually all capacitors used in electronics equipment. A selectable hold feature prevents the range from resetting when a capacitor is removed, for faster batch testing of large value capacitors. The instrument has application in electronic engineering labs, production, service shops, and schools. It can be used to check tolerance, sort values, select precision values, measure unmarked capacitors, select matched sets, and measure cable or switch capacitance. Its battery operation, light weight, and small size make it a truly portable instrument.

TABLE OF CONTENTS

	Page
Optional Accessories.....	2
Specifications.....	2
Operating Controls.....	4
Operating Instructions	5
Servicing	8
Useful Conversions.....	10

OPTIONAL ACCESSORIES

BE-12 AC/DC ADAPTOR

Allows for operation from AC line voltage. Output is 9VDC/300mA with center pin positive.

TL-830 CLIP LEAD SET

Designed to interface with Model 830A. Enables quick connection to capacitor to be tested.

LG29B CARRYING CASE

Offers convenience and protection while transporting the instrument. Sturdy grained leatherette construction, rugged snap fasteners, and handle. Cover swings away to permit use of meter while in carrying case. Storage for test leads and manual.

SPECIFICATIONS

CAPACITANCE

Range: 10 ranges, fully automatic with range hold. Full scale value from 199.9 pF to 199.9 mF.

Resolution: 0.05% of full scale on all ranges.

Accuracy: 10% to Full Scale
0.2% of reading, ± 0.5 pF, ± 1 digit to 19.99 μ F.
1.0% of reading, ± 1 digit from 20 μ F to 199.9 mF.
0-10% of Full Scale
Add 0.1% of full scale up to 19.99 μ F (including 199.9 pF range).
Add 0.5% of full scale from 19.99 μ F to 199.9 mF.

Reading Update Time: <1.0 second to 25 mF, increasing to 8 seconds at 200 mF.

Auto Zero: Can compensate up to 2000 pF of test lead capacitance.

Overrange Indication: "01"

GENERAL

Display: 3-½ digit, 0.5" LCD with low battery indicator.

Front Panel Controls: POWER ON-OFF switch, HOLD switch, and AUTO ZERO.

Power Source: 9VDC alkaline battery provided with unit. Option to use 9VDC/300 mA adapter with center plug positive.

Battery Life: 20 hours typical with alkaline batteries.

Operating Temperature: +15° to +35° C; usable at reduced accuracy 0° to +50° C.

Dimensions: 7.5" x 4.0" x 2.0"

Weight: 1 lb.